DOCUMENT RESUME

ED 477 388 CE 084 915

TITLE	Education and Training in Europe: Diverse Systems, Shared Goals for 2010. The Work Programme on the Future Objectives of Education and Training Systems.
INSTITUTION	European Commission, Brussels (Belgium).
REPORT NO	NC-43-02-745-EN-C
ISBN	ISBN-92-894-3682-4
PUB DATE	2002-00-00
NOTE	43p.; For this publication in Danish, Dutch, Finnish, French, German, Greek, Italian Portuguese, Spanish and Swedish, see: http://europa.eu.int/comm/dgs/education_culture/publ/educ-form_en .html#Educ-training.
AVAILABLE FROM	For full text (English): http://europa.eu.int/comm/dgs/education_culture/publ/pdf/ educ-training/ en.pdf
PUB TYPE	Opinion Papers (120)
EDRS PRICE	EDRS Price MF01/PC02 Plus Postage.
DESCRIPTORS	*Access to Education; Adult Education; Career Development; Computer Mediated Communication; Developed Nations; *Diversity (Institutional); *Educational Change; Educational Improvement; Educational Objectives; *Educational Planning; *Educational Policy; Equal Education; Foreign Countries; Information Technology; *International Cooperation; International Educational Exchange; Job Skills; Lifelong Learning; Second Language Learning; Strategic Planning
IDENTIFIERS	*European Union

ABSTRACT

To benefit the European Union(EU) and its citizens, the EU has set education and training(ET) goals to be achieved by 2010 that will reflect the diversity of languages, cultures, and systems that are an inherent part of the identity of its countries and their regions. Diversity is valued, but need for cooperation and mobility in ET is growing. The open method of coordination has been defined as a way to enable mutual comparison and learning and limit risks inherent in change and reform. In the detailed work program, 3 identified strategic objectives are broken down into 13 objectives and 42 key issues that must be addressed to achieve them. Strategic objective (SO) 1 (improve quality and effectiveness of ET systems), has five objectives; SO 2 (facilitate access of all to ET systems) has three; and SO 3 (open up ET systems to the wider world) has five. For each objective, key issues are set out and an indicative list is provided of the instruments that will be used to foster and monitor progress. An integrated approach to policy development will be steered and monitored. (An appendix lists 16 key documents and web sites.)(YLB)

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Education and training in Europe:

diverse systems, shared goals for 2010

European Commission
Directorate-General for Education and Culture

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Directorate-General for Education and Culture

Education and training in Europe:

diverse systems, shared goals for 2010

The work programme on the future objectives of education and training systems

European Commission

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A great deal of additional information on the European Union is available on the Internet.
It can be accessed through the Europa server (http://europa.eu.int).

Cataloguing data can be found at the end of this publication.

Luxembourg: Office for Official Publications of the European Communities, 2002

ISBN 92-894-3682-4

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Printed in Belgium

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Shared ambitions for 2010

For the benefit of citizens and the European Union as a whole

On 14 February 2002 the ministers in charge of education and training in EU countries and the European Commission set themselves the following goals to be achieved by 2010 'for the benefit of citizens and the European Union as a whole':

- *the highest quality will be achieved in education and training and Europe will be recognised as a worldwide reference for the quality and relevance of its education and training systems and institutions;*
- *education and training systems in Europe will be compatible enough to allow citizens to move between them and take advantage of their diversity;*
- *holders of qualifications, knowledge and skills acquired anywhere in the EU will be able to get them effectively validated throughout the Union for the purpose of career and further learning;*
- *Europeans, at all ages, will have access to lifelong learning;*
- *Europe will be open to cooperation for mutual benefits with all other regions and should be the most-favoured destination of students, scholars and researchers from other world regions.*

These are ambitious, but realistic goals. They mark the beginning of a new phase in the development of education and training in the European Union context, based on diverse systems sharing common goals. These shared goals will guide and inspire reforms and foster progress within each country as well as action at the level of the European Union as a whole. It is expected that they will also be shared by the countries joining the European Union as new Member States in the course of the decade.

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Diversity and cooperation in education and training

The Europe of education and training reflects the diversity of languages, cultures and systems that are an inherent part of the identity of its member countries and their regions. Education and training have for a long time developed within national contexts and in relative isolation from each other. Countries and regions have a wide variety of education and training institutions, apply different admission rules, use different academic calendars, award hundreds of different degrees and qualifications reflecting a wide variety of curricula and training schemes.

This diversity is valued very highly by nations as well as citizens: diversity is one thing all Europeans have in common. At the same time there is a growing need for cooperation and mobility in education and training, in order to make it possible for citizens to benefit from diversity rather than being constrained by limitations resulting from incompatibilities. The awareness of this need for cooperation has grown steadily over the last 20 years within the framework of the process of European integration, not least since a generation of political authorities, teachers and learners of EU countries has been exposed to very similar challenges and opportunities.

In the European Union the organisation of education and training systems and the content of learning programmes are the responsibility of the Member States – or their constituent regions as the case may be. In accordance with the principle of 'subsidiarity', the European Union may support and complement the action of Member States in certain areas of education and training where it can foster quality by generating 'European value added'. These areas are set out in Articles 149 and 150 of the Treaty and include in particular:

- the promotion of the mobility of students/learners and teachers;
- the development of cooperation between schools and universities;
- the stimulation of language learning;
- the improvement of the recognition of degrees, qualifications and competencies for educational and professional purposes;
- the development of open and distance learning.

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On this basis, two types of education and training activities have developed at European level.

- In areas where Articles 149 and 150 define a specific European competency, EU-wide programmes have been adopted and are being implemented, e.g. the broad Socrates and Leonardo da Vinci programmes covering the various types and levels of education and training respectively. The adoption of such common schemes or measures requires a joint decision by the Education Council and the European Parliament (Article 251 of the Treaty).

- In addition to these areas with a clearly defined European Union competency numerous initiatives have been launched in education and training in the context of the EU on the basis of political cooperation between Member States. This is not based on EU directives but takes the form of recommendations (e.g. on eliminating obstacles to mobility or on quality evaluation of higher education institutions and schools), communications from the Commission (e.g. on making lifelong learning a reality or on cooperation with third countries), consultations or other working documents (such as the White Paper on Youth Policy). This kind of political cooperation has grown in education and training in various forms in recent years. Its development has been boosted by the Lisbon European Council of March 2000, which started the process leading to the adoption of the work programme on the future objectives of education and training less than two years later.

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New ambitions for Europe and for education and training: the Lisbon European Council of March 2000

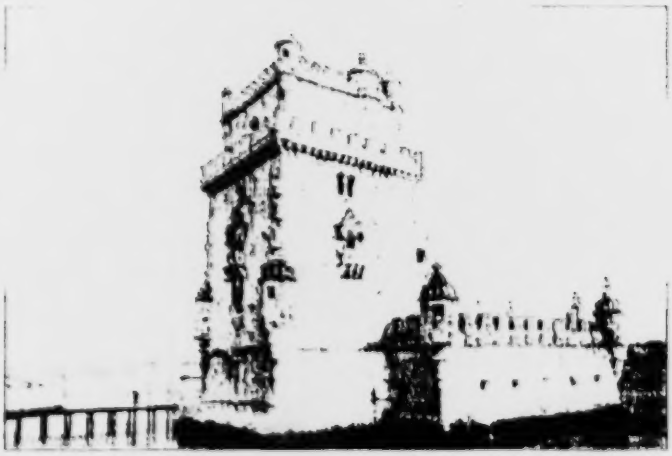
At its meeting in Lisbon in March 2000, the European Council (the Heads of State or Government of the EU countries) acknowledged that the European Union was confronted with a quantum shift resulting from globalisation and the knowledge-driven economy, and agreed a strategic target for 2010:

> *To become the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion.*

These changes required not only *a radical transformation of the European economy, but also a challenging programme for the modernisation of social welfare and education systems.* The European Council called on the Education Council (the education ministers of the EU countries) and on the European Commission *to undertake a general reflection on the concrete objectives of education systems, focusing on common concerns while respecting national diversity.*

The Lisbon European Council at the same time defined a new approach to political coordination applicable in areas such as education and training: the 'open method of coordination', which has as its main purpose *to achieve greater convergence towards the main EU goals* by helping Member States *to progressively develop their own policies* towards them.

This provided both the initial impetus and the political means for the preparation and adoption of the work programme on the future objectives of education and training systems on 14 February 2002.



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A landmark agreement:
the work programme on future objectives of education and training systems

Follow-up to the Lisbon European Council

Following the invitation from the Lisbon European Council of March 2000, the Commission first prepared a draft report on the future concrete objectives of education and training systems which was negotiated by the Member States. A final report was adopted by the Council and transmitted to the Stockholm European Council in March 2001. It set out the following three strategic goals:

– improving the quality and effectiveness of education and training systems in the EU;

– facilitating the access of all to education and training systems;

– opening up education and training systems to the wider world.

This 'objectives report' was adopted in Stockholm and thus became the first official document sketching a comprehensive and coherent European approach to national education and training policies in the EU. It was also agreed that the follow-up work should be pursued and that a detailed work programme should be prepared and submitted jointly by the Council and the Commission to the spring 2002 European Council in Barcelona.

The detailed work programme on future objectives of education and training systems was adopted on 14 February 2002.

– It sets out the key issues that need to be addressed in order to achieve the three strategic goals and the 13 objectives that have been agreed.

– It covers the various segments and levels of education and training, from basic skills to vocational and higher education, having particular regard to the principle of lifelong learning.

– It identifies the main instruments that will be used to foster and to measure progress, applying the 'open method of coordination' defined in Lisbon to foster the convergence of national policies towards shared goals (see next section) and comparing Europe's achievements both internally and in a worldwide perspective

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Getting recognised as a key priority domain in the Lisbon strategy

At the same time as adopting the work programme, the Council (the ministers of education) and the Commission issued an important political message in their joint report to the European Council (the Heads of State or Government) meeting a few weeks later, on 15 and 16 March 2002, in Barcelona.

– However effective the policies in other areas, making the European Union the leading knowledge-based economy in the world will only be possible with the crucial contribution from education and training as factors of economic growth, innovation, sustainable employability and social cohesion. The importance of education and training has been increasingly acknowledged since 2000 but the Barcelona Council has been requested to go one step further and to explicitly recognise education and training as a key priority domain in the overall Lisbon strategy.

– Notwithstanding their crucial role in the Lisbon process, education and training are more than instruments for employability and have broader responsibilities to citizens and society. Beyond equipping Europeans for their professional career, education and training contribute to their personal development for a better life and active citizenship in democratic societies respecting cultural and linguistic diversity. They play also an important role in building up social cohesion by preventing discrimination, exclusion, racism and xenophobia and hence in promoting the fundamental values shared by European societies, such as tolerance and the respect for human rights. The creation of a cohesive and open European education and training area will be of utmost importance for the future of Europe and its citizens in the knowledge era and the globalised world.

– Therefore, ministers in charge of education and training and the European Commission went beyond the invitation of the European Council to work towards common objectives. They acknowledged their responsibility and affirmed their determination to take all initiatives required for a comprehensive response to the challenges of the knowledge society and globalisation, as well as of EU enlargement. Numerous measures have already been taken since 2000 in the direction of lifelong learning and in a worldwide perspective and first results have been achieved in Member States and at the European level, e.g. in the fields of mobility, basic skills, access to learning, professional, vocational and higher education, quality evaluation and assurance, eLearning and cooperation with non-EU countries. These steps pave the way to achieving by 2010 a set of ambitious goals for the benefit of citizens and the European Union as a whole to which ministers and the Commission committed themselves on 14 February 2002 (these are the goals set out at the beginning of this brochure, on page 4).

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A promising new approach: the open method of coordination

A new means to foster convergence of national policies towards shared goals

The open method of coordination was defined by the Lisbon European Council as 'the means of spreading best practice and achieving greater convergence towards the main EU goals ... [it] is designed to help Member States to progressively develop their own policies ...' Its purposes in the area of education and training may be defined as a way of enabling mutual comparison and learning, and thereby of limiting the risks inherent in change and reform.

The effectiveness of change and reform is enhanced when it can draw on the best experience gained in Europe (and, possibly, outside Europe) and is situated in a context of meaningful comparisons with other European and non-European countries. Knowing the critical factors that made a reform successful elsewhere is essential for the transfer of good practice, which may otherwise degenerate into the mere copying of activities and lead to disappointing results. Finally, knowing that the other EU countries also strive to induce change in a given direction will encourage reform and reduce the political risks involved. This is what the open method of coordination, with its battery of indicators, benchmarks, exchanges of good practice, peer reviews, etc., is all about. This is what needs to be put in motion for the successful implementation of the detailed work programme on the future objectives of education and training systems.

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Opening up the process to other European countries

Associated countries already participate in the Leonardo da Vinci and the Socrates programme, as well as in the full range of EU research activities. There are regular informal meetings between the education ministers of the EU and the candidate countries. Furthermore, all candidate countries are involved in the 'Bologna process' towards the creation of a coherent European higher education area by 2010.

Most associated countries are expected to join the EU well before the end of the decade. They would open to them the possibility to participate as EU Member States in the implementation of the work programme on the objectives of education and training within the time horizon set for it. It was therefore natural that the European Council meeting in Stockholm in March 2001 agreed that associated countries should be involved in the goals and procedures of the overall Lisbon strategy and its education and training strand. Change and reform in education and training systems require a medium to long-term perspective and it is necessary to start cooperation in these fields without delay, not least because the associated countries may in many areas contribute examples of forward-looking reforms and other good practices.

Arrangements for their effective participation in this process will be decided at the regular meeting of education ministers of the EU and the associated countries scheduled in June 2002 in Bratislava.

EFTA countries will also be invited to join the work towards the implementation of the objectives of education and training systems. This means that the process is likely to involve some 25 to 30 European countries when it is fully operational.

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Thirteen objectives for three strategic goals

The work programme is organised around the three strategic objectives that were identified in the report on the future concrete objectives of education and training systems. In the detailed work programme these three strategic objectives are broken down into 13 objectives and 42 key issues that need to be addressed to achieve them and cover the wide spectrum of areas related to education and training.

The 13 objectives are the following:

Strategic objective 1: Improving the quality and effectiveness of education and training systems in the EU, in the light of the new requirements of the knowledge society and the changing patterns of teaching and learning:

Objective 1.1.: Improving education and training for teachers and trainers
Objective 1.2.: Developing skills for the knowledge society
Objective 1.3.: Ensuring access to ICT for everyone
Objective 1.4.: Increasing recruitment to scientific and technical studies
Objective 1.5.: Making the best use of resources

Strategic objective 2: Facilitating the access of all to education and training systems, in the light of the guiding principle of lifelong learning, fostering employability and career development as well as active citizenship, equal opportunities and social cohesion:

Objective 2.1.: Creating an open learning environment
Objective 2.2.: Making learning more attractive
Objective 2.3.: Supporting active citizenship, equal opportunities and social cohesion

Strategic objective 3: Opening up education and training systems to the wider world, in the light of the fundamental need to foster relevance to work and society and to meet the challenges resulting from globalisation:

Objective 3.1.: Strengthening the links with work and research and society at large
Objective 3.2.: Developing the spirit of enterprise
Objective 3.3.: Improving foreign language learning
Objective 3.4.: Increasing mobility and exchange
Objective 3.5.: Strengthening European cooperation

For each of these 13 objectives, the pages that follow set out the key issues that need to be addressed and an indicative list of the main instruments that will be used to foster and monitor progress.

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Strategic objective 1:

Improving the quality and effectiveness of education and training systems in the EU

Objective 1.1.: Improving education and training for teachers and trainers

Objective 1.2.: Developing skills for the knowledge society

Objective 1.3.: Ensuring access to ICT for everyone

Objective 1.4.: Increasing recruitment to scientific and technical studies

Objective 1.5.: Making the best use of resources

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Objective 1.1.:

Improving education and training for teachers and trainers

Teachers and trainers are the most essential actors in the overall strategy towards a knowledge society and a knowledge-based economy. Attracting and retaining well-qualified and motivated people in the teaching profession, which is faced with massive recruitment needs due to the ageing of the teaching population, is a short and medium-term priority in most European countries. Europe needs to improve the ways in which teachers and trainers are prepared for, and supported in, their profoundly changing role in the knowledge society. This is also related to a change in the public perception of the teaching profession and the general expectations of society concerning school, as well as education and training in general.

Key issues that need to be addressed:

- **identifying the skills that teachers and trainers should have, given their changing roles in a knowledge society;**
- **providing the conditions which adequately support teachers and trainers as they respond to the challenges of the knowledge society, including through initial and in-service training in the perspective of lifelong learning;**
- **securing a sufficient level of entry to the teaching profession, across all subjects and levels, as well as providing for the long-term needs of the profession by making teaching and training more attractive;**
- **attracting recruits to teaching and training who have professional experience in other fields.**

Instruments to foster and monitor progress (indicative list):

- **Quantitative tools: indicators:**

– shortage/surplus of qualified teachers and trainers on the labour market;
– number of applicants for training programmes for teachers and trainers;
– percentage of teachers and trainers who follow in-career training.

- **Qualitative tools: areas for exchange of experience :**

– evaluation of training programmes for teachers and trainers;
– conditions for becoming a teacher or trainer according to educational level;
– inclusion of ICT, foreign languages, a European dimension and intercultural aspects into curricula;
– career development and promotion systems in the teaching profession;
– improvement of working conditions of teachers.

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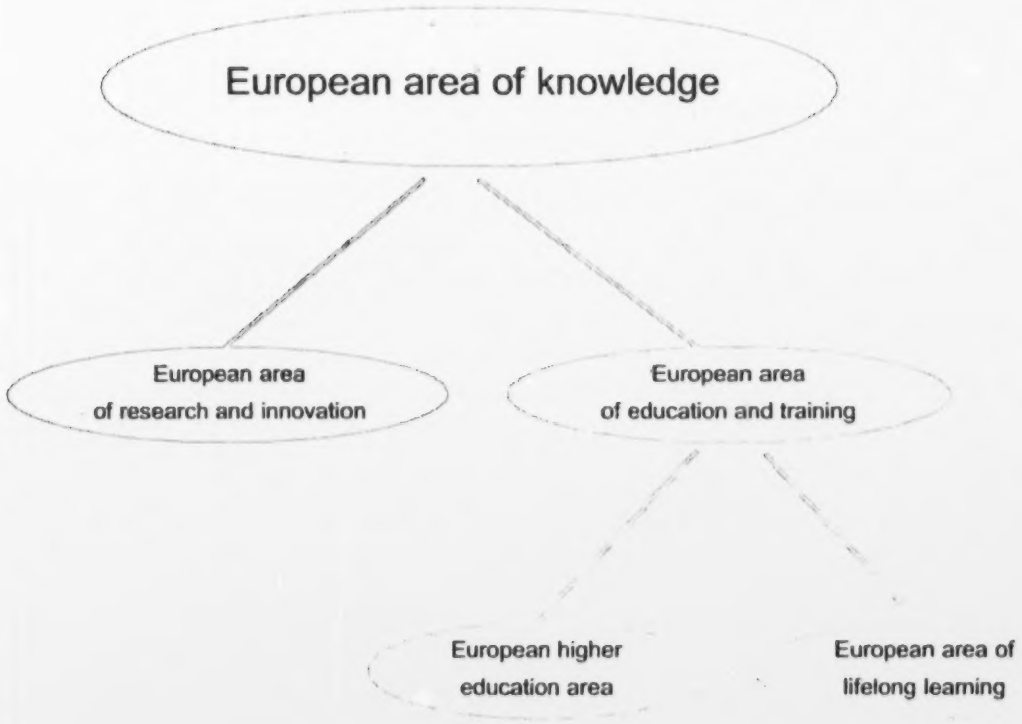

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Objective 1.2.:

Developing skills for the knowledge society

Across the EU there is currently not yet a common understanding of what basic skills are and should cover. For many, 'basic' refers to numeracy and literacy. For some, 'skills' is narrower than 'competencies' and does not cover attitudes, aptitudes and knowledge. Yet all these aspects need to be taken into account, bearing in mind lifelong learning and the diversity of education and training systems and cultures. 'Skills' for the knowledge society need to be defined in view of needs anticipated in the medium and long-term, including not only numeracy and literacy (foundation skills) but also basic competencies in science, foreign languages, the use of ICT and technology, learning to learn, social skills, entrepreneurship, and what might be called general culture.

While acknowledging the importance of other factors such as the role of the family or teen-age peer pressure, the acquisition of these 'basic skills' or 'key competencies' is largely dependent on the quality and relevance of teaching. There must therefore be a close link with the objective to improve education and training for teachers and trainers. Ensuring and monitoring the acquisition of key competencies by all requires both appropriate curriculum design for those at school and the effective use of lifelong learning opportunities for adults, paying special attention to disadvantaged groups.

The acquisition or possession of key competencies needs to be testified by the award of degrees, diplomas, certificates or credits in a way that makes their recognition as straightforward as possible. Methodological work is required in order to achieve this, even in areas where their assessment may be more difficult, e.g. concerning the acquisition of social competencies.

Key issues that need to be addressed:

- **identifying new basic skills, and how these skills together with the traditional basic skills can be better integrated in the curricula, learned and maintained through life;**
- **making attainment of basic skills genuinely available to everyone, including those less advantaged, those with special needs, school drop-outs and to adult learners;**
- **promoting official validation of basic skills, in order to facilitate ongoing education and training and employability.**

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Instruments to foster and monitor progress (indicative list):

- **Quantitative tools: indicators**

– people completing secondary education;
– continuous training of teachers in areas of emerging skills needs;
– literacy attainment levels (a PISA indicator; PISA is the programme for international student assessment coordinated by OECD);
– numeracy/mathematics attainment levels (also a PISA indicator);
– learning to learn attainment levels;
– percentage of adults with less than upper secondary education who have participated in any form of adult education or training, by age group.

- **Qualitative tools: areas for exchange of experience**

– performance and results in the mother tongue, foreign language and mathematics up to the end of compulsory education;
– literacy and numeracy developments in schools and in provision for adults.

Skills for the knowledge society

	Present levels			
	EU average (1)	Average of three best performing in EU	US	Japan
Numeracy/ mathematics (scores)	494	528	493	557
Literacy (scores)	498	532	504	522

Source: PISA, OCDE, 2001.
(1) NL not included – average 14 member States.

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Objective 1.3.:
Ensuring access to ICT for everyone

This objective goes beyond the previously agreed requirement that all schools in the EU should have access to internet and multimedia resources by the end of 2001. Quality education in the knowledge society requires not only equipment, broadband communication facilities (Internet/intranet) and general maintenance, but also the provision of services addressing the broad scope of educational requirements: high-quality digital educational content, educational software, remote and local (virtual/real) services, tutoring, guidance, adequate levels of teaching and managerial support.

There are other crucial conditions concerning the best use of innovative teaching and learning techniques based on ICT.

– There was a previous agreement that all teachers would be skilled in the use of these technologies by the end of 2002 in order to provide pupils with a broad digital literacy.

– ICT should be used for the purpose of enhancing the quality of education provided. There is a need to identify areas and approaches where ICT has a clearly positive impact on teaching and learning. In this way, education and training will be able to turn towards learner-centred approaches that take fully into account the variations in learning styles and pedagogical requirements among the student population. In this context it is particularly important to guide and support teachers in their widening roles.

– It is equally important to assess if ICTs are actually used to their full extent and how they impact on the outcomes of learning processes in terms of skills and knowledge acquisition.

– There is a need to support decision makers, at all levels, with a view to addressing current education policy issues (such as the integration of non traditional learners, curricular and didactic innovation, European and international collaboration) and providing them with means to implement 'ICT-induced' changes in education and training programmes.

Key issues that need to be addressed:

- **providing adequate equipment and educational software so that ICT and e-learning can be applied effectively in teaching and training practices;**
- **encouraging the best use of innovative teaching and learning techniques based on ICT.**

Instruments to foster and monitor progress (indicative list):

- **Quantitative tools: indicators**

– percentage of teachers who have been trained in ICT use in schools;
– percentage of pupils and students using ICT in their studies;
– percentage of learning sessions in teaching and training institutions using ICT.

- **Qualitative tools: areas for exchange of experience**

– quality of hardware and software in schools;
– use of ICTs in various subjects;
– use of ICTs in non-formal education;
– qualitative assessment of the use of ICT in education.

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Objective 1.4.:

Increasing recruitment to scientific and technical studies

Scientific and technological development and innovation are a sine qua non requirement in a competitive knowledge-based society and economy. The joint meting of EU Ministers of Education and Ministers of Research in Uppsala in March 2001 stressed the need to increase the recruitment to scientific and technological disciplines throughout the whole education and training system, including through a general renewal of pedagogy and closer links to working life and industry. To those already engaged in scientific and research professions, Europe needs to offer career prospects and rewards sufficiently satisfactory to keep them there.

Key issues that need to be addressed:

- increasing the interest in mathematics, science and technology from an early age;
- motivating more young people to choose studies and careers in the fields of mathematics, science and technology in particular research careers and scientific disciplines where there are shortages of qualified personnel, in a short and medium term perspective, in particular through the design of strategies for educational and vocational guidance and counselling;
- improving gender balance among people learning mathematics, science and technology;
- securing a sufficient numbers of qualified teachers in mathematics and scientific and technical subjects.

Instruments to foster and monitor progress (indicative list):

- Quantitative tools: indicators

– increase in number of entries into mathematics, science and technology courses (upper secondary advanced levels and tertiary levels, by gender);
– increase in number of graduates in these areas, by gender;
– increase in number of scientists and engineers, by gender;
– increase in number of qualified teachers in MST (secondary level).

- Qualitative tools: areas for exchange of experience

– inclusion of scientific and technical subjects in secondary education;
– school strategies to encourage pupils to study natural science, technology and mathematics and to support teaching in these subjects.

Recruitment to scientific and technical studies

Number of graduates as percentage of total number (2000 for most countries)	Present levels	
	EU average	Average of three best performing in EU
Natural science	5.1 %	8.3 %
Mathematics and computer science	3.8 %	7.3 %
Engineering, manufacturing and construction	14.3 %	20.1 %

Source: Eurostat, UOE data collection 2000 – provisional data.

NB: GR: missing ; L: the country does not have a complete education system. Natural science includes also mathematics and science ;A: professionally oriented tertiary education (ISCED 5B) is not included ; NL: PhD level studies (ISCED 6) missing.

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Objective 1.5.:

Making the best use of resources

In the knowledge society, achieving the objective to provide more effective and more relevant education and training throughout life increases the overall need for higher investment in education and training. This goes for public spending on human resources, spending in private enterprises and investment by each individual. Although public finance is becoming generally tighter in EU countries, Europe cannot afford to hold back here.

The Lisbon conclusions call for a substantial annual increase in per capita investment in human resources, pointing out that the future of the European economy depends very largely on the skills of its citizens, and these in turn need the continuous updating which is characteristic of knowledge societies. In turn, the education and training sector must allocate and use resources made available to it in the most efficient way possible in order to achieve the highest levels of quality.

Key issues that need to be addressed:

- **increasing investment in human resources while ensuring an equitable and effective distribution of available means in order to facilitate general access to and enhance the quality of education and training;**
- **supporting the development of compatible quality assurance systems respecting diversity across Europe;**
- **developing the potential of public-private partnerships.**

Instruments to foster and monitor progress (indicative list):

- **Quantitative tools: indicators**

– increase in per capita investment in human resources (structural indicator).

- **Qualitative tools: areas for exchange of experience**

– self-evaluation to improve the quality of education provided;
– funding models and experiments (public and private financing of education and training institutions and learners).

Public investment in education

		Present levels		
	EU average (*) (1999)	Average of three best performing in EU (1999)	US (1998)	Japan (1998)
Public expenditure on education as a % of GDP (*)	5.0 %	7.3 %	5.0 %	3.5 %

(*) Based on the structural indicator (http://europa.eu.int/comm/eurostat/Public/datashop/printproduct/en/catalogue=Eurostat&product=1-ir010-EN&mode=download). NB: F:educational expenditure figures do not include DOM(Departements d'Outre Mer); UK:estimates, based on data for UK financial years which run from 1 April to 31 March; L: Missing.

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Strategic objective 2:

Facilitating the access of all to education and training systems

Objective 2.1.: Creating an open learning environment

Objective 2.2.: Making learning more attractive

Objective 2.3.: Supporting active citizenship, equal opportunities and social cohesion

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Objective 2.1.:

Creating an open learning environment

The transformations required by the transition to a knowledge society require that access to education and training be simplified and genuinely open. They also call for a system of 'bridges' at all levels making it possible to move from one track of the education and training system to another: no learner should be 'stuck' for not choosing the right track immediately and everyone deserves a chance to progress towards a different or higher level of qualification. At the same time, the EU needs to develop its working population, increasing not only the employment rate but also the general skills levels.

The complex architecture of many education and training systems is usually meant to provide the best possible opportunities to the widest possible populations of learners. But their very complexity makes them difficult to understand and to use, in particular for the least-informed groups, and increases the incompatibilities between tracks and between national systems. The development of guidance and orientation for the purpose of study and future career is a fundamental requirement for making European systems more effective and more democratic. Learners in Europe must be in a position to capitalise on their previous learning efforts and achievements and must therefore be assured that the corresponding credits will be fairly recognised throughout the European Union.

Key issues that need to be addressed:

- **broadening access to lifelong learning by providing information, advice and guidance, on the full range of learning opportunities available;**
- **delivering education and training so that adults can effectively participate and combine their participation in learning with other responsibilities and activities;**
- **ensuring that learning is accessible for all, in order to better respond to the challenges of the knowledge society;**
- **promoting flexible learning paths for all;**
- **promoting networks of education and training institutions at various levels in the context of lifelong learning.**

Instruments to foster and monitor progress (indicative list):

- **Quantitative tools: indicators for measuring progress:**

– percentage of the population between 25 and 64 participating in education and training (structural indicator).

- **Qualitative tools: areas for exchange of experience:**

– availability of childcare and flexible learning times to learners;
– possibilities of educational leave for employees;
– accreditation of prior learning;
– funding mechanisms and incentives for adults.

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Objective 2.2.:

Making learning more attractive

Making learning attractive means first of all making it relevant for the individual. Education and training systems, together with families, local communities and employers, have a major role to play here if learning is really to become part of everyone's activity. Learning also needs to be made more attractive in order to increase employment rates and meet the higher skills levels needed. This can only be achieved if individuals see the value to themselves of continuing to learn and making efforts.

The Lisbon European Council of March 2000 and the EU employment guidelines for 2001 emphasise a core target: to halve by 2010 the number of 18 to 24-year-olds with only lower secondary education who are not in education and training.

Key issues that need to be addressed:

- **encouraging young people to remain in education or training after the end of compulsory education; and motivating and enabling adults to participate in learning through later life;**
- **developing ways of officially validating non-formal learning experiences.**
- **finding ways of making learning more attractive, both within the formal education and training systems and outside them;**
- **fostering a culture of learning for all and raising the awareness of potential learners of the social and economic benefits of learning.**

Instruments to foster and monitor progress (indicative list):

- **Quantitative tools: indicators**

– percentage of working time spent by employees on training, per age group;
– participation in tertiary education;
– proportion of the population aged 18–24 with only lower secondary education and not in education or training (structural indicator).

- **Qualitative tools: areas for exchange of experience:**

– in-service training courses and related benefits (e.g. salary increase) designed to motivate learners;
– possibility of following open courses, on-line or distance learning;
– validation of experience acquired.

Participation in education

	Present levels	
	EU average	Average of three best performing in EU
Proportion of students in tertiary education (ISCED 5, 6) as a percentage of all pupils and students, 1999/00 (a)	15 %	20.8 %
Percentage of people who do not have an upper secondary qualification aged 25–34, 2000 (b) (')	25.9 %	12.1 %

(a) Source: Eurostat, UOE (students at ISCED5,6 / total number of students).
(b) Source: LFS ((respondents aged 25–34 with educational attainment not beyond ISCED 2)/total number of respondents aged 25–34).
(') IRL: missing . UK: GCSEs are considered upper secondary qualifications.

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Objective 2.3.:

Supporting active citizenship, equal opportunities and social cohesion

Education and training systems play an important role in sustaining democratic societies in Europe. A basic principle that needs to be reinforced is that all citizens should have equal access to education and training. This entails that in Member States special attention is paid to supporting vulnerable groups and individuals, particularly those with disabilities or learning difficulties, those living in rural or remote areas and those faced with problems in reconciling their work and family commitments. Where a significant proportion of individuals drop out prematurely from education and training, the loss is manifold: not only to the persons concerned who miss the possibility to fulfil their potential, but also to society and the economy as a whole. Such losses become all the more unacceptable in the competitive environment of the knowledge era, where the success of individuals, companies and countries depends on the achievement of high levels of qualification for a high proportion of the population. Other aspects related to citizenship, equal opportunities and social cohesion are essential dimensions of education and training in their own right.

These are the reasons underpinning the strong message sent by the Lisbon European Council and reflected in the EU employment guidelines for 2001 concerning the reduction by 50 % of the number of young adults who have not completed upper secondary education and are not engaged in some type of education or training.

Key issues that need to be addressed:

- **ensuring that the learning of democratic values and democratic participation by all school partners is effectively promoted in order to prepare people for active citizenship;**
- **integrating fully equal opportunity considerations in the objectives and functioning of education and training;**
- **ensuring fair access to acquisition of skills for the less privileged or those currently less well served and motivating them to participate in learning.**

Instruments to foster and monitor progress (indicative list):

- **Quantitative tools: indicators:**

- proportion of the population aged 18-24 with only lower secondary education and not in education or training (structural indicator).

- **Qualitative tools: areas for exchange of experience:**

– participation of pupils, parents and other stakeholders in school governance;
– gender equality in tertiary education and continuous training;
– models for integration of and giving access to disadvantaged groups to education and training; models for encouraging them to pursue formal qualifications.

Active citizenship, equal opportunities and social cohesion

	Present levels	
	EU average	Average of three best performing in EU
Proportion of the population aged 18-24 with only lower secondary education and not in education or training (2000) (a)	17.8 %	7.8 %(1)

Source: (a) LFS (Structural indicator: Early school leaver)

(1) IRL: missing . UK: GCSEs are considered upper secondary qualifications

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Strategic objective 3:

Opening up education and training systems to the wider world

Objective 3.1.: Strengthening the links with working life and research, and society at large

Objective 3.2.: Developing the spirit of enterprise

Objective 3.3.: Improving foreign language learning

Objective 3.4.: Increasing mobility and exchange

Objective 3.5.: Strengthening European cooperation

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Objective 3.1.:

Strengthening the links with working life and research, and society at large

In spite of significant change over the last decade in many countries and/or institutions, education and training systems in Europe still tend to remain in many ways turned upon themselves, paying more attention to teaching than learning, focusing more on curricula than on learners and valuing abstract academic quality more than relevance. Greater cooperation is required with a broad range of actors in business, research, social partners and society at large. This is also required to transform education and training establishments themselves into learning organisations that stay open to change, contributions, ideas and talent coming from outside and aim to remain - or become - relevant to the actual needs of the individuals they serve. More open and responsive institutions will also be in a better position to stimulate the sense of enterprise and initiative required from their students, trainees and graduates.

Key issues that need to be addressed:

- **promoting close cooperation between education and training systems and society at large;**
- **establishing partnerships between all types of education and training institutions, firms and research facilities for their mutual benefit;**
- **promoting the involvement of relevant stakeholders in the development of training, including initial training and learning at the workplace.**

Instruments to foster and monitor progress (indicative list):

- **Quantitative tools: indicators:**

– percentage of students and trainees in initial training benefiting from placement arrangements (*éducation en alternance*).

- **Quantitative tools: areas for exchange of experience:**

– participation of parents in school life and in children's learning in general;
– participation of local representatives in school life;
– collaboration of schools with local organisations;
– cooperation of education and training institutions with businesses, for example concerning placements and training opportunities;
– participation of teachers in training organised and carried out in cooperation with business;
– descriptive studies on how education and training establishments seek to attract and involve those currently outside education and training systems.

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Objective 3.2.:

Developing the spirit of enterprise

Education and training should provide an understanding of the value of 'enterprise' in the broadest possible meaning of the word, i.e. the eagerness to find solutions to problems, the commitment of time and efforts to pursuing success, the willingness to take initiatives and reasonable risks. A knowledge society and a service-based economy provide new opportunities to millions of individuals to start their own independent business at any age and this option should be seen as viable and desirable, by young students as well as adults with accumulated experience.

Over the last decade, the importance of developing new forms of work and business closely linked to the needs of local communities or specific industries has been increasingly recognised. Its potential impact on reducing unemployment has also been acknowledged. Developing the spirit of enterprise is therefore important for individuals as well as for the economy and society at large. The promoting of 'education for entrepreneurship and self-employment' is also an agreed goal included in the EU employment guidelines for 2001.

Key issues that need to be addressed:

- **promoting the sense of initiative and creativity throughout the education and training system in order to develop the spirit of enterprise ('entrepreneurship');**
- **facilitating the acquisition of skills needed to set up and run a business.**

Instruments to foster and monitor progress (indicative list):

- **Quantitative tools: indicators**

– proportion of self-employed in various sectors of the knowledge economy (particularly age group 25–35);
– percentage of education and training institutions providing counselling and guidance for setting up businesses.

- **Qualitative tools: areas for exchange of experience:**

– qualitative assessment of young graduates starting enterprises according to economic sector; viability of these enterprises;
– promotion of self-employment;
– teaching of entrepreneurship at various educational levels.

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Objective 3.3.:

Improving foreign language learning

Europe's diversity is nowhere clearer than in its languages. Yet citizens can only benefit from this diversity if they are able to communicate with others across the linguistic lines and thus to learn about differences, tolerance and mutual respect. The command of more than one language is a fundamental part of the new basic skills required from Europeans in the knowledge society. The ideal that everyone should be able to speak two foreign languages remains as a guiding principle. There is a basic need to improve foreign language learning, including, where appropriate, from an early age.

This will in many cases only be possible through deep changes in the objectives, curricula and teaching methods of foreign languages and through a much closer contact between those teaching and learning a foreign language and individuals from countries where is spoken. The initial and in-service training of language teachers and their direct exposure to the language and culture they teach are therefore central to this objective.

The Community has for a significant time emphasised the importance of language learning in Europe and promoted it as a key dimension of education, culture, citizenship and employability. Real progress could already be achieved in this area through the implementation of a simple objective like reducing by a significant proportion the number of Europeans over 15 years of age, not knowing any other language than their mother tongue(s).

Key issues that need to be addressed:

- **encouraging everyone to learn two, or where appropriate, more languages in addition to their mother tongues, and increasing awareness of the importance of foreign language learning at all ages;**
- **encouraging schools and training institutions in using efficient teaching and training methods and motivating continuation of language learning at a later stage of life.**

Instruments to foster and monitor progress (indicative list):

- **Quantitative tools: indicators**

The Council and the Commission have noted that there is still no reliable data on the actual ability of young Europeans to use a foreign language; further work must therefore be done in order to define and implement good quality indicators in this area.
In the meantime, the following indicators will be used:

- percentage of pupils and students who reach a given level of proficiency in two foreign languages, for instance the level B2 of the Council of Europe's common european framework of reference for languages;
- percentage of language teachers who participated in initial or in-service training involving a direct contact with the country and culture where the language is spoken.

- **Qualitative tools: areas for exchange of experience:**

- methods and ways of organising the teaching of languages;
- early language learning;
- ways of promoting the learning and practice of foreign languages.

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Objective 3.4.:

Increasing mobility and exchange

Mobility promotes the feeling of belonging to Europe and the emergence of European citizenship. It allows young people to improve their personal skills and employability, and offers teachers and trainers an opportunity to broaden their experience and enhance their skills. In an increasingly complex Europe all available means to make mobility easier and promote it concretely must be effectively used in order to enable people, and in particular young people, to identify with Europe.

The European Union already has a solid basis in this field. The Socrates, Leonardo and Youth programmes provide good examples of this, even though concrete experience shows that the potential of mobility as an instrument towards the Lisbon goals is still far from being used to the full extent. The mobility action plan approved by the Nice European Council, the recommendation of the European Parliament and the Council on mobility and the work on new European labour markets are signals showing that mobility now receives high political recognition.

Key issues that need to be addressed:

- **providing the widest access to mobility to individuals and to education and training organisations, including those serving a less privileged public and reducing the remaining obstacles to mobility;**
- **monitoring the volume, directions, participation rates as well as qualitative aspects of mobility flows across Europe;**
- **facilitating validation and recognition of competencies acquired during mobility;**
- **promoting the presence and recognition of European education and training in the world as well as their attractiveness to students, academics and researchers from other world regions.**

Instruments to foster and monitor progress (indicative list):

- **Quantitative tools: indicators**

– proportion of national students and trainees carrying out part of their studies in another EU or third-country;
– proportion of teachers, researchers and academics from other EU countries employed at different educational levels;
– number and distribution of EU and non-EU foreign students and trainees.

- **Qualitative tools: areas for exchange of experience**

– financing, participation and geographical distribution of EU and national exchange programmes;
– social benefits, e.g. in public transportation or museums, granted to mobile people;
– evaluation of the results and development of Europass;
– information on mobility offers and conditions of the EU and the Member States;
– ECTS in vocational training;
– development of 'certificate supplement' in vocational training (similar to diploma supplement in higher education);
– transferability of national grants for foreign education and training periods.

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Objective 3.5.:

Strengthening European cooperation

In the new Europe of the knowledge society, citizens should be able to learn and work throughout Europe, and make full use of their qualifications wherever they want to study or pursue a professional career. In the higher education area in particular, the obstacles to mobility and to recognition of qualifications are already being tackled, both through EU instruments (such as the ECTS or the university partnerships within the Socrates programme) and through the 'Bologna process' towards a coherent, compatible and attractive European higher education area.

However, there remains substantial work to be done before Europeans can effectively study and work freely throughout Europe without having to face cumbersome and uncertain procedures for the recognition of their qualifications. Therefore, higher education and other educational institutions as well as authorities should be encouraged to develop more compatible systems of qualifications across Europe and a common understanding of what are the minimum levels of quality required for accreditation. Policies on the transparency and recognition of qualifications must be strengthened. The development of joint degrees and qualifications and the setting-up of accreditation systems should be encouraged, both to enhance the quality of European education and training and to ensure that this quality is duly understood and recognised around the world.

Key issues that need to be addressed:

- **enhancing the effectiveness and timeliness of recognition processes for the purpose of further study, training and employment throughout Europe;**
- **promoting cooperation between responsible organisations and authorities in view of more compatibility in quality assurance and accreditation;**
- **promoting transparency of information on education and training opportunities and structures in view of the creation of an open European area for education;**
- **promotion of the European dimension of teaching and training.**

Instruments to foster and monitor progress (indicative list):

- **Quantitative tools: indicators**

– proportion of undergraduate and postgraduate students and researchers continuing their studies in another EU or third country;
– percentage of graduates obtaining joint degrees in Europe;
– percentage of students and trainees within ECTS or Europass and/or obtaining diploma/certificate supplement.

- **Qualitative tools: areas for exchange of experience**

– promotion of accreditation in higher education;
– promotion of joint courses and degrees in Europe which are internationally recognised;
– promotion of relevant marketing initiatives;
– inclusion of the European dimension in education and training.

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Making it happen:

an integrated approach to policy development

The responsibility for achieving the shared objectives lies primarily with the participating countries. Within the framework of the EU and in accordance with the open method of coordination, the main thrust of the Council's and the Commission's work will be to make the process happen by supporting Member States in their efforts to improve their own education and training systems in order to achieve the objectives, in two ways:

- through meaningful comparisons with others on the basis of indicators and benchmarks;

- through the sharing of experience based on the identification of key factors of success of initiatives or experiments carried out in other countries, and possibly on cross-border peer review.

In addition to current EU Member States, the implementation process will also involve the countries of the European Economic Area and the candidate countries and will thus encompass a total of 30 countries.

A single comprehensive strategy for education and training

Over the last few years a number of actions pointing in directions of some of the Objectives of the Work programme have been agreed within the EU framework, in particular the lifelong learning consultation and communication) or outside it (e.g. the Bologna process in higher education). The implementation of these policy strands needs to be integrated into the 3 goals and 13 objectives of the Work programme on the objectives of education and training systems, within the framework of a single comprehensive approach. In this way, consistency will be enhanced and double work avoided, and the whole 'objectives process' will be pervaded by the guiding principle of lifelong learning and placed in a worldwide perspective.

This integrated approach will be steered and monitored by the Commission in close cooperation with the Council (Education)

The implementation of the work programme on the Objectives will also be supported by releasing the potential of European cooperation in other forms: new priorities for specific parts of Community programmes like Socrates and Leonardo da Vinci, action plans, study visits of decision-makers to other countries, comparative and prospective studies, statistical and other surveys, pilot projects, etc. Many of these also build on the work of other international organisations (such as the OECD and the Council of Europe), European networks and NGOs, cooperation schemes or pilot projects between Member States or with candidate countries (e.g. on sustainable professionalisation or basic skills).

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Working within each objective

The implementation of the work programme on the future objectives of education and training systems will address all 13 objectives in a coherent way, thereby harnessing and enhancing their European added value. The work on three objectives has started already in 2001 (skills for the knowledge society; maths, science and technology; and the use of ICTs) and will start in a coordinated way in 2002 on all remaining ten, in agreement with the timetable included in the Work Programme.

This will require the creation of a limited number of objective groups dealing with one specific objective (as has been the case for those on which the work has already started) or with a set of two or three related ones (for most of those to be set up in the course of 2002). These groups will include experts designated by the participating countries but will also be able to draw on intellectual and content input from the European Commission. Each group will also need input from stakeholders in the education and training community (academics, teachers, trainers, professionals, NGOs...) as well as from EU agencies (like Cedefop, Eurydice or the European Training Foundation) and outsiders to the process (like OECD, UNESCO or the Council of Europe).

The task of these groups will be to take the work forward and ensure that progress is effectively made towards the achievement of the objective(s) with which they deal. This may involve different types of implementation activities, including in particular:

- an inventory of activities contributing to the objective;
- opinions concerning suitable indicators, benchmarks and data collection;
- the identification of a set of good practices, including the analysis of the 'critical factors of success' and possibly a number of site visits;
- advice on the exchange of experience, in the form of good practice dissemination and, if requested, peer reviews;
- the monitoring of progress towards the objective, using in each case the most relevant quantitative and/or qualitative tools available.

The mix of activities to be applied will be different for each particular objective, drawing in each case on the most appropriate instruments. This will make it possible to focus action and to use the limited financial and human resources available in the most efficient way.

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Indicators and benchmarks

The issue of indicators and benchmarks is central to the success of the whole process. The work programme includes only an 'indicative' list of indicators and establishes just one core benchmark which was taken over directly from the conclusions of the Lisbon European Council: 'the number of 18 to 24-year-olds with only lower secondary education who are not in further education or training should be halved by 2010'.

Many of the indicators that will be used are supported by existing statistical data of the UOE (i.e. the joint data collection of UNESCO, the OECD and Eurostat). In some cases national data exists and progress can be measured, but comparisons between countries would be more or less hazardous. A few new indicators may nonetheless need to be developed (methodology, common definitions, data collection). This is a costly and time-consuming process and priorities will need to be expressed in order to target efforts towards a small number of well-defined key indicators.

The implementation of the work programme will therefore require structured and continuous support from a standing group on indicators and benchmarks consisting of experts designated by the participating countries. The expertise of the UOE partners, Eurydice and the Cedefop will also be needed in the group.

This group has already been set up by the Commission. Its role is to provide expert views and advice on the use of indicators and benchmarks within the coordination process as a whole. The first step will be to study and review the proposed indicative list of indicators. This is mainly a mapping exercise, comparing the various indicators mentioned in the Work Programme with what is available nationally and internationally. On this basis, the group's role is to provide expert advice on the usability and comparability of existing indicators and on the possibility to develop a few adapted or new ones.

The work programme also opens the possibility to establish European benchmarks 'where feasible', provided a consensus can be reached in the Education Council. In addition, it foresees that Member States may set themselves 'reference criteria' (benchmarks) for 2004 and 2010 and communicate them on a voluntary basis.

The final list of proposed indicators and benchmarks will be proposed up by the Commission and will need to be approved by the Council.

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Exchange of experience: learning from 'good practice' and peer review

Learning from each other is a core component of the open method of coordination and a major way in which it can support the improvement of education and training policies at national and regional level.
The most important aspect of the work in this area consists in identifying the critical factors of success of 'good practice' in certain countries, regions or institutions. This will be an essential part of the work of each Objective Group, drawing on expert advice and views from the constituency.
Expert analysis of selected experiences, including possibly a limited number of site visits, will be conducted along the following lines:
- identification of a list of positive and innovative national, regional or local practices;
- identification of the critical factors of success, i.e. what made a pilot scheme, an experiment or a reform successful in its original context and what are the basic elements that have to be taken into account in order to learn from the success and eventually transfer it into a different setting;
- formulations of recommendations for each of the themes based on the analysis made.

The notion of (cross border) peer review was included by the Lisbon European Council as one of the tools available within the open method of coordination. Within education and training it will be used only at the request of a Member State.

Review of the process in 2004

The time horizon for the whole work programme is the decade until 2010. This is also the deadline set within other processes, e.g. the Bologna process aiming at the creation of a coherent, compatible and attractive European higher education area. It is a realistic timeframe: reforms in education tend to produce their effect in the medium term rather than immediately.

However, the work has already started and an intermediate stage will be reached in 2004:

- by that time the work on all objectives will have been launched, and it will have reached a more advanced phase in the three objectives on which it started first (i.e. those dealing with new basic skills, information technologies and with mathematics, science and technology);

- the list of indicators and benchmarks against which progress will be assessed should have been finalised;

- although candidate countries joined the process only from June 2002, it is reasonable to expect that the work programme will also have reached the implementation stage in all of them by 2004;

An intermediate report on the implementation of the work programme on the objectives will be submitted jointly by the Education Council and the Commission to the spring 2004 meeting of the European Council, under Irish Presidency. It will look to the process as a whole, reviewing activities and the first results achieved.

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Annex 1:

Statistical data

EU Member States	Objective 1.2. Developing skills for the knowledge society		Objective 1.4. Increasing the recruitment to scientific and technical studies		
			Percentage of tertiary students (ISCED 5 and 6) in relevant fields, 2000 (1)		Share of tertiary graduates (ISCED 5 and 6) in science and technology per 1000 inhabitants aged 20-29, 2000 (2)
	Numeracy/ Mathematics (scores)	Literacy (scores)	Science, mathematics & computing	Engineering, manufacturing & construction	Science, mathematics & computing, Engineering manufacturing & constructuring
B	520	507	9,2	11,8	9,7
DK	514	497	10,2	10,0	(:)
D	490	484	12,7	15,8	8,2
EL	447	474	(:)	(:)	(:)
E	476	493	12,6	16,1	9,9
F	517	505	(:)	(:)	(:)
IRL	503	527	16,9	11,4	23,2
I	457	487	7,6	16,8	(:)
L	446	441	9,3	8,1	1,8
NL	(:)	(:)	5,9	10,7	5,5
A	515	507	11,6	14,0	7,1
P	454	470	9,4	17,9	6,3
FIN	536	546	10,6	25,6	(:)
S	510	516	11,4	19,1	11,6
UK	529	523	14,8	8,8	16,2
source:	OECD, PISA, 2000		Eurostat, UOE		

(1) Germany and the Netherlands exclude advanced research programmes (ISCED level 6); Luxembourg does not have a complete universitary system and data refers to other tertiary education (ISCED level 5B) only; Austria excludes ISCED level 5B

(2) Netherlands excludes advanced research programmes (ISCED level 6); Luxembourg does not have a complete universitary system and data refers only to ISCED level 5B first degree; Austria excludes ISCED level 5B

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	Objective 1.5. Making the best use of resources	Objective 2.3. Supporting citizenship, equal opportunities and social cohesion
EU Member States	Public expenditure on education as a % of GDP (1999)	Proportion of people aged 25–34 who do not have an upper secondary qualification, 2000 (1)
B	5,5	24.6
DK	8,0	13.1
D	4,7	15.4
EL	3,7	27.5
E	4,5	43.8
F	5,9	23.6
IRL	4,6	(:)
I	4,5	40.9
L	(:)	31.8
NL	4,8	25.2
A	6,3	16.2
P	5,7	67.9
FIN	6,2	13.9
S	7,7	12.8
UK	4,6	(:)(1)
Source:	Eurostat, UOE	Eurostat, Labour Force Survey

(1) Data not shown, since a definition of 'upper secondary attainment' in the UK has still to be agreed

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Annex 2:

Key documents and web sites

European Council documents

- European Council of Lisbon of 23 and 24 March 2000 – Conclusions of the Presidency: http://ue.eu.int/fr/info/eurocouncil/index.htm

- European Council of Stockholm of 23 and 24 March 2001 – Conclusions of the Presidency: http://ue.eu.int/fr/info/eurocouncil/index.htm

- Communication from the Commission to the Spring European Council in Barcelona, 'The Lisbon strategy – making change happen', COM(2002) 14 final, 15 January 2002

Concrete future objectives of education and training

- Report by the Commission on the 'Concrete future objectives of education and training', (COM(2001) 59 final) 31 January 2001.

- Communication from the Commission, 'Draft detailed work programme for the follow-up of the report on the concrete objectives of education and training', (COM(2001) 501 final) – 7 September 2001.

- Communication from the Commission on 'Structural indicators' (COM(2001) 619 final 30 October 2001.

- Decision of the Council (Education): 'Detailed work programme on the follow-up of the objectives of education and training in Europe', 14 February 2002.

Lifelong learning

- Commission working paper on a 'Memorandum on lifelong education and training', SEC(2000)1832 – 30 October 2000.

- Communication from the Commission on 'Making a European area of lifelong learning a reality', COM(2001) 678 final) – 1 November 2001: http://www.europa.eu.int/comm/education/life/communication/com_en.pdf

eLearning

- Communication from the Commission on 'The eLearning action plan – designing tomorrow's education', COM(2001) 172 final) 28 March 2001.

- Council resolution on eLearning, Official Journal (OJ C204/2 , p.3) 20 July 2001.

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Mobility and cooperation

- Recommendation of the European Parliament and the Council of 10 July 2001 on 'Mobility within the Community for students, persons undergoing training, volunteers, teachers and trainers', Official Journal (OJ L 215, p.30) 9 August 2001.

- Communication from the Commission on 'Strengthening cooperation with third countries in the field of higher education', (COM(2001) 385 final) 18 July 2001.

Education and training, employment and science

- Council Resolution of 13 July 2001 on the role of education and training in employment related policies. Official Journal (OJ C 204/01, p.1) 20 July 2001.

- Communication from the Commission, 'Commission's action plan for skills and mobility', COM(2002) 72 final, 8 February 2002.

- Communication from the Commission on 'Science and society – action plan', COM(2001) 714 final, 4 December 2001.

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European Commission

Education and training in Europe: diverse systems, shared goals for 2010

Luxembourg: Office for Official Publications of the European Communities

2002 – 39 p. – 250 X 176 mm

ISBN 92-894-3682-4

NC-43-02-745-EN-C

OFFICE DES PUBLICATIONS OFFICIELLES
DES COMMUNAUTÉS EUROPÉENNES
L-2985 Luxembourg

ISBN 92-894-3682-4

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